Evidence of NTN impact in Texas: September 2020

2019 End of Course high school and middle school data

NTN high school students outperform non-NTN students in 97% of statistically significant comparisons made between NTN and non-NTN students on academic year (AY) 2018-19 Texas end of course (EOC) exams.

### APPROACHES:
- In 13/13 comparisons, NTN consistently outperformed in: English 1, English 2, Biology

### MEETS:
- In 14/14 comparisons, NTN consistently outperformed in: Biology, English 1, English 2

### MASTERS:
- In 6/7 comparisons, NTN consistently outperformed in: Biology

NTN middle school students outperform non-NTN students in 94% of statistically significant comparisons made between NTN and non-NTN students on academic year (AY) 2018-19 Texas end of course (EOC) exams across all performance bands.

### APPROACHES:
- In 24/25 comparisons, NTN consistently outperformed in: Reading, Writing, Math, and Science

### MEETS:
- In 23/25 comparisons, NTN consistently outperformed in: Reading, Writing, Math, and Science

### MASTERS:
- In 16/17 comparisons, NTN consistently outperformed in: Reading, Math, and Science

2018 End of Course high school data

New Tech students outperform non-NTN students in 95% of the statistically significant comparisons across the 3 performance bands (approaches, meets, and masters). Significantly more New Tech students are achieving at each level of performance across subjects.

### APPROACHES:
- In 15/15 comparisons, NTN consistently outperformed in: Algebra 1, Biology, English 1, and English 2

### MEETS:
- In 14/14 comparisons, NTN consistently outperformed in: Biology, English 1, English 2

### MASTERS:
- In 10/11 comparisons, NTN consistently outperformed in: Biology, English 1, English 2

2018-19 critical thinking testing data

New Tech Network elementary and high school students in Texas made statistically significant gains in critical thinking as measured by the Insight Assessment Educate Series (formerly the California Critical Thinking Skills Test) developed by Facione.

The overall average gain from pretest to posttest was statistically significant for elementary and high school students.

The sub topics of Analysis, Induction, Deduction, and Numeracy at the elementary school level showed statistically significant gains.

The sub topics of Evaluation and Interpretation at the high school level showed statistically significant gains.
2016, 2017, and 2018 English II End of Course exam data

NTN Students in Texas scored statistically significantly higher on English II exams, controlling for ethnicity, disability, income, giftedness, English language learner status, and the overall poverty levels within the school building.

References and Study Notes

   - Percentage of students who met standard were compared (school within school/main campus) using chi-squared testing in 7 schools.

   - Percentage of students who met standard in each of the performance bands for each subject in 2017-18 were compared (school within school/main campus) using chi-squared testing in 4 schools.

   - Statistical significance was evaluated using the GLM function for Repeated Measures comparing pre- and post-test scores (68 10th grade students and 49 4th grade students).

   - OLS Regression and multi-level modeling (9 NTN, 53 non-NTN schools) was used to evaluate the impact on English II performance.

   - Concurrent triangulation mixed method design collected site visit and survey data from nine schools (5 NTN/4 non-NTN) and 253 students (NTN =149/Non-NTN 105).